

Ancient Mariners Come Home

BY SALLY R. MURPHY

It is late spring and all along the southeastern coast of the United States, loggerhead sea turtles, ancient reptiles from the time of the dinosaurs, are arriving for the nesting season. It has taken them 30 years to reach an age when they are ready to start nesting. There are many mysteries surrounding much of their life history, but one thing is for sure ... they have many human friends waiting for them to help ensure their species' survival.

The females will have made the journey from their winter feeding grounds all along the Continental Shelf from the Outer Banks of North Carolina to the warm waters of South Florida. In route to our shores, they will have mated with males lying in wait along the way. They migrate back to the general region where they were hatched (not necessarily the exact beach) and the loggerheads coming to the Carolinas and Georgia are genetically distinct from those going to Florida.

They swim continuously when migrating and will not eat during the two to three months of the nesting season. There just is not enough room within their rigid shells for the hundreds of developing eggs and a full stomach and gut.

When the first clutch of eggs has shells, a female will approach the beach of her choice in late afternoon and wait for darkness. Once she is ready, she will ascend the beach in a slow but powerful waddle. She stops occasionally to rest. As she moves, she plows her beak into the sand. Is she sensing something that tells her this spot is right? We don't know.

At the base of a well-drained dune, she will use her flippers to form a body pit. Then with her rear flippers, she begins to dig the egg chamber. The flippers can form a cuplike hand to bring sand to the surface, carefully placing it beside the hole. The finished chamber is flared out at the bottom like a light bulb. She immediately begins to drop the eggs. Since they are leathery, not brittle like bird eggs, they do not break when they fall the 1.5 to 2 feet to the bottom. The eggs resemble ping-pong balls and she will deposit an average of 120 eggs in each clutch.

With the egg laying completed, she begins to pull sand into the top of the egg chamber with her hind flippers and tamp it down with her body. She then flings large scoops of sand everywhere with her front flippers to disguise the location of the nest. When finished, she turns and makes her way back down the beach and into the surf. The whole ritual takes well over an hour. The early morning light reveals two tractor-like tracks on the beach.

Almost immediately after entering the sea, her hormones trigger a new clutch of eggs to start down the oviduct, so she swims to her inter-nesting area to rest and make ready the next clutch. The inter-nesting area is usually one of high relief, such as a shoal or reef or up in the quiet waters of a sound. It will take about two weeks to complete the development of the next clutch. When ready, she swims back to her preferred beach to nest again. This will be repeated an average of four times during the season. That's almost 500 eggs!

When she has laid the last clutch for the season, a sudden drop in hormones tells



Satellite technology is revealing the mysteries of where females go in the vast ocean.



The tears from this nesting female serve to rid her body of excess salt.



Loggerhead females lay about 120 ping-pong sized eggs in each clutch.



A non-nesting emergence, or false crawl, has no body pit.



A typical nesting track with the distinct body pit at the apex of the crawl.

her it is time to leave and she immediately starts her migration back to the feeding grounds. But this time, if she is heading north, she will bypass her wintering area and continue around Cape Hatteras to join other females in the crab-rich coastal areas of Delaware Bay, off the coast of New Jersey or along the Delmarva Peninsula and southern Virginia. It will take them several years to replenish the fat stores that were used up during

the nesting season.

In October, when these northern waters become too cold for sea turtles, females will once again move south, around Cape Hatteras, to the warmer, mid-shelf waters of North Carolina. Females who have migrated to southern feeding grounds do not have to make this double migration in winter.

Unbeknownst to the turtles, human hands have been at work to ensure their nests will be

safe during the 60 days of incubation. Hundreds of volunteers work tirelessly to mark, screen from predators, and in some cases, move doomed nests away from high tides to a better location. In the next issue of Southern Home-Scapes, we will see what happens when they hatch.

Sally R. Murphy is a licensed Realtor with Coldwell Banker Platinum Partners' Beaufort office. She may be reached at 843.592.7946.









